



Appendix B

ENVIRONMENTAL EVALUATION

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Master Plan
Colorado City Municipal Airport

Analysis of the potential environmental impacts of proposed airport development is an important component of the airport master plan process. The primary purpose of the environmental evaluation is to assess the proposed development program for Colorado City Municipal Airport to identify any potential environmental concerns or “red flags” to development.

An important element of this evaluation was coordination with appropriate federal, state, and local agencies to identify potential environmental concerns what should be considered prior to the design and construction of new facilities at the airport. Agency coordination consisted of a letter requesting comments and/or information regarding the potential environmental effects of proposed airport development over the next 20 years. Issues of concern that were identified as part of this process are presented in the following sections. The letters received from the various agencies are included in Appendix C.

Any major improvements planned for Colorado City Municipal Airport (i.e. runway extension and strengthen) will require compliance with the National Environmental Policy Act of 1969, as amended (NEPA). Compliance with NEPA is generally satisfied by the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS). While this section of the Master Plan is not structured to satisfy NEPA requirements, it is intended to supply a preliminary review of environmental considerations that would need to be analyzed in more detail within the NEPA process.

PROPOSED DEVELOPMENT

As a result of the Master Plan analysis, a number of improvements have been recommended for implementation during the planning period of this Master Plan. The Airport Layout Plan (Chapter Five) illustrates the proposed development for Colorado City Municipal Airport. The following is a list of major projects recommended for Colorado City Municipal Airport.

- Acquire approximately 170 acres of land to protect airfield safety areas and provide for facility expansion.
- Construct an aircraft wash facility.
- Construct T-hangars and associated taxiway access.
- Construct additional clearspan (conventional hangars).
- Expand existing apron.
- Construct new apron area.
- Construct a new terminal entrance road.
- Extend utilities.
- Construct parallel taxiway access to each runway end. Install medium intensity taxiway lighting (MITL).
- Construct runway exit taxiways.
- Establish Global Positioning System (GPS) approaches to each end of Runway 11-29.
- Install precision approach path indicators to each end of Runway 2-20.
- Upgrade the Runway 11-29 pavement strength to 75,000 pounds (DWL).
- Extend Runway 11-29 and associated parallel taxiway 600 Feet West (for a total length of 6,900 feet).

ENVIRONMENTAL CONSEQUENCES - SPECIFIC IMPACTS

This environmental evaluation has been prepared using *FAA Order 1050.1D, Policies and Procedures for Considering Environmental Impacts*, and *FAA Order 5050.4A, Airport Environmental Handbook* as guidelines. Several factors are considered in a formal environmental document, such as an EA or EIS, which are not included in an environmental evaluation. These factors include details regarding the project location, historical perspective, existing conditions at the airport, and the purpose and need for the project. This information is available within the Master Plan document. A formal environmental document also includes the resolution of issues/impacts identified as significant during the environmental process. Consequently, this environmental evaluation only identifies potential environmental issues and does address mitigation or the resolution of environmental impacts. The following subsections address each of the specific impact categories outlined by *FAA Order 5050.4A*.

NOISE

Aircraft sound emissions are often the most noticeable environmental effect an airport will produce on the surrounding community. If the sound is sufficiently loud or frequent in occurrence it may interfere with various activities or otherwise be considered objectionable.

To determine the noise related impacts that the proposed development could have on the environment surrounding Colorado City Municipal Airport, noise exposure patterns were analyzed for both existing airport activity conditions and projected long term activity conditions.

Noise Contour Development

The basic methodology employed to define aircraft noise levels involves the use of a mathematical model for aircraft noise predication. The Yearly Day-Night Average Sound Level (DNL) is used in this study to assess aircraft noise. DNL is the metric currently accepted by the FAA, Environmental Protection Agency (EPA), and Department of Housing and Urban Development (HUD) as an appropriate measure of cumulative noise exposure. These three federal agencies have each identified the 65 DNL noise contour as the threshold of incompatibility, meaning that noise levels below 65 DNL are considered compatible with underlying land uses. Most federally funded airport noise studies use DNL as the primary metric for evaluating noise.

DNL is defined as the average A-weighted sound level as measured in decibels (dB), during a 24-hour period. A 10 dB penalty is applies to noise events occurring at night (10:00 p.m. to 7:00 a.m.). DNL is a summation metric which allows objective analysis and can describe noise exposure comprehensively over a large area.

Since noise decreases at a constant rate in all directions from a source, points of equal DNL noise levels are routinely indicated by means of a contour line. The various contour lines are then superimposed on a map of the airport and its environs. It is important to recognize that a line drawn on a map does not imply that a particular noise condition exists on one side of the line and not on the other. DNL calculations do not precisely define noise impacts. Nevertheless, DNL contours can be used to: (1) highlight existing or potential incompatibilities between and airport and any surrounding development; (2) assess relative exposure levels; (3) assist in the preparation of airport environs land use plans; and (4) provide guidance in the development of land use control devices, such as zoning ordinances, subdivision regulations and building codes.

The noise contours for Colorado City Municipal Airport have been developed from the Integrated Noise Model (INM), Version 5.2. The INM was developed by the Transportation Systems Center of the U.S. Department of Transportation at

Cambridge, Massachusetts, and has been specified by the FAA as one of the two models acceptable for federally funded noise analysis.

The INM is a computer model which accounts for each aircraft along flight tracks during an average 24-hour period. These flight tracks are coupled with separate tables contained in the data base of the INM which relate to noise, distances, and engine thrust for each make and model of aircraft type selected.

Computer input files for the noise analysis assumed implementation of the recommended development of the airport as identified on the Airport Layout Drawing. The input files contain operational data, runway utilization, aircraft flight tracks, and fleet mix as projected in the plan. The operational data and aircraft fleet mix are summarized in **Table A**. For more detailed information of the aviation forecasts for Colorado City Municipal Airport refer to Chapter Two, Aviation Demand Forecasts.

TABLE A Aircraft Forecast Summary		
	Annual Operations	
Type of Operation	Existing (1997)	2020
Itinerant Operations		
Single-Engine Piston	200	3,750
Multi-Engine Piston	80	1,900
Turboprop	80	650
Business Jet	100	350
Helicopter	<u>40</u>	<u>150</u>
Total Itinerant Operations	500	6,800
Local Operations		
Single-Engine Piston	1,900	5,000
Multi-Engine Piston	<u>600</u>	<u>1,700</u>
Total Local Operations	2,500	6,700
Total Operations	3,000	13,500

Basis assumptions used as input to the INM are presented in **Table B**. The runway use percentages and day/night split were assumed to remain constant over the planning period.

TABLE B Noise Contour Input Data				
	Runway Use Percentages			
Type of Operation	11	29	2	20
Single-Engine/Multi-Engine Piston, Turboprop, Helicopters	30%	30%	20%	20%
Business Jet Aircraft	50%	50%	0%	0%
Day/Night Split				
Type of Operation	Percent Day		Percent Night	
Itinerant Operations	95%		5%	
Local Operations	95%		5%	

Results of the Noise Analysis

The aircraft noise contours generated using the aforementioned data for Colorado City Municipal Airport are depicted on **Exhibit A, Existing Noise Exposure** and **Exhibit B, 2020 Noise Exposure**. As shown on both exhibits, the 65 DNL noise contour is expected to remain within the existing airport property line when considering both existing and forecast activity at the airport. The 60 DNL noise contour is also depicted to identify areas considered as marginal noise impact. As shown on the exhibit, the 60 DNL noise contour is also located within the existing and ultimate property line.

Considering existing operational activity, the 65 DNL noise contour encompasses approximately 0.15 square miles. Considering projected 2020 operational activity, the 65 DNL noise contour encompasses approximately 0.14 square miles. The primary reason for the reduction is the gradual phase-out of older, noisier business jet aircraft through the planning period. As evidenced on the exhibits, while the runway is expected to be extended and operational levels quadruple, the noise contour for the airport is expected to remain essentially the same over the planning period.

COMPATIBLE LAND USE

Federal Aviation Regulations (F.A.R.) Part 150 recommends guidelines for planning land use compatibility within various levels of aircraft noise exposure as summarized on **Exhibit C**. As the name indicates, these are guidelines only; F.A.R. Part 150 explicitly states that determinations of noise compatibility and regulation of land use are purely local responsibilities.

Based upon the results of the noise modeling efforts, the 65 DNL noise contour is expected to remain on airport property and no existing residences, or other noise sensitive land uses (e.g. hospitals, nursing homes, schools, etc.) are located within the either the existing or ultimate noise exposure contour. Therefore, no significant noise impacts are expected as a result of the proposed development.

The primary goal of compatible land use planning is to achieve and maintain compatibility between the airport and its surrounding community. Inherent in this goal is the assurance that the airport can maintain or expand its size and level of operations to satisfy existing and future aviation demand. The protection of the investment in a facility such as an airport is of great importance. At the same time, a person who lives, works, or owns property near an airport should be able to enjoy the location without infringement by noise or other adverse impacts of the airport. Towards this goal, the Town of Colorado City enacted land use zoning for the areas surrounding the airport on August 14, 1995 to identify compatible land uses near the airport. The Airport Development-Mixed Use (AD-MU) District extends 5,000 feet from each runway end. In general, only commercial and/or industrial type land use are permitted within the AD-MU District. Residential and recreational land uses, as well as churches, hospitals, schools, and nursing homes are not permitted within this district.

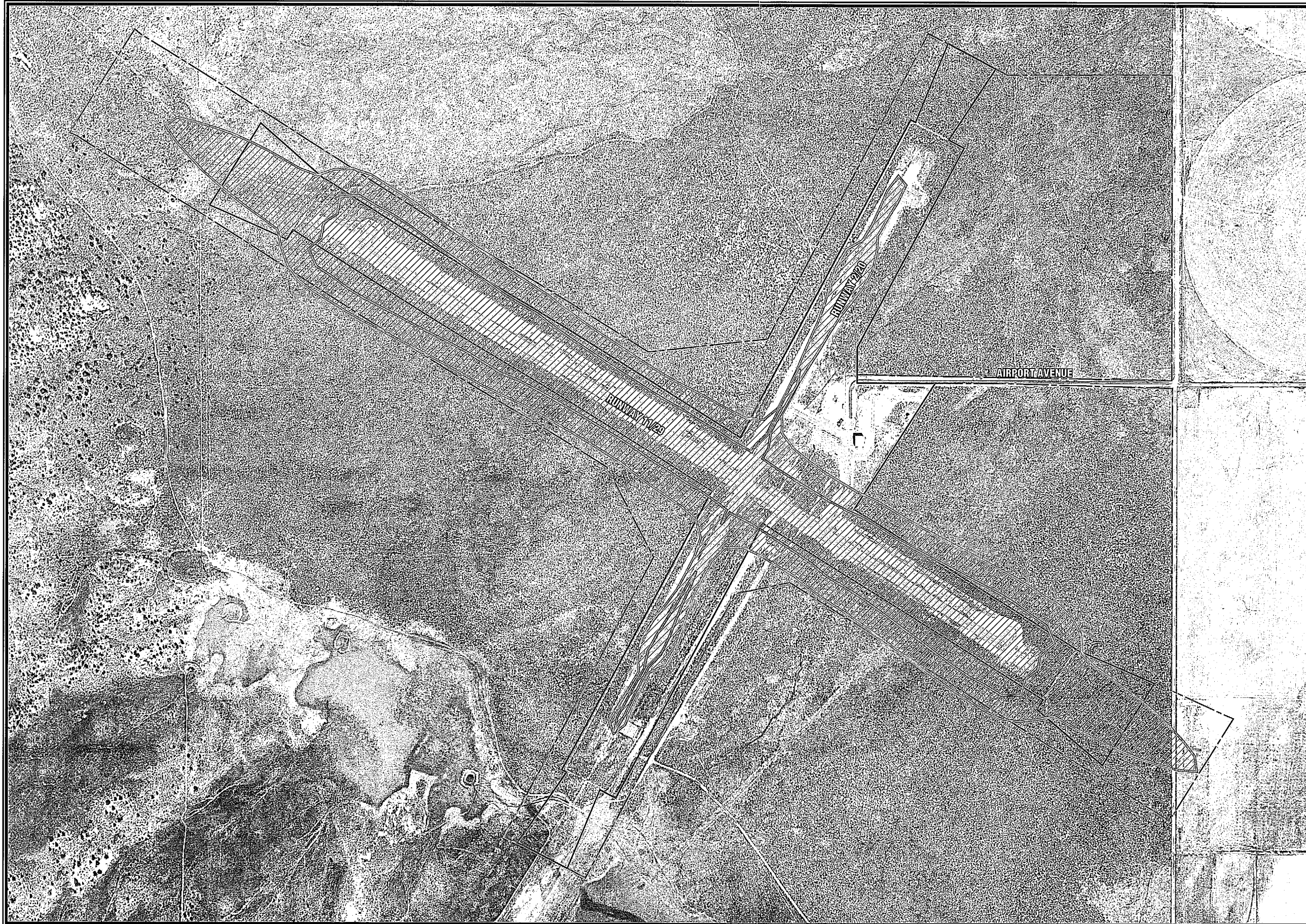
SOCIAL IMPACTS

Social impacts known to result from airport improvement projects are often associated with the relocation of residences and businesses or other community disruptions. Development of the proposed improvements at Colorado City Municipal Airport is not expected to result in the relocation or removal of a residence or business.



The proposed development and associated land acquisition are not anticipated to divide or disrupt and established community, interfere with orderly planned development, or create a short-term, appreciable change in employment. The proposed land acquisition as a part of airport development is currently undeveloped and used mostly for cattle grazing purposes.

INDUCED SOCIOECONOMIC IMPACTS

Induced socioeconomic impacts address those secondary impacts to surrounding communities resulting from the proposed development, including shifts in patterns of population movement and growth, public service demands, and changes in business and economic activity to the extent influenced by the airport development. According to *FAA Order 5050.4A*, "Induced impacts will normally not be significant except where the area also has significant impacts in other categories, especially noise, land use or direct social impacts."



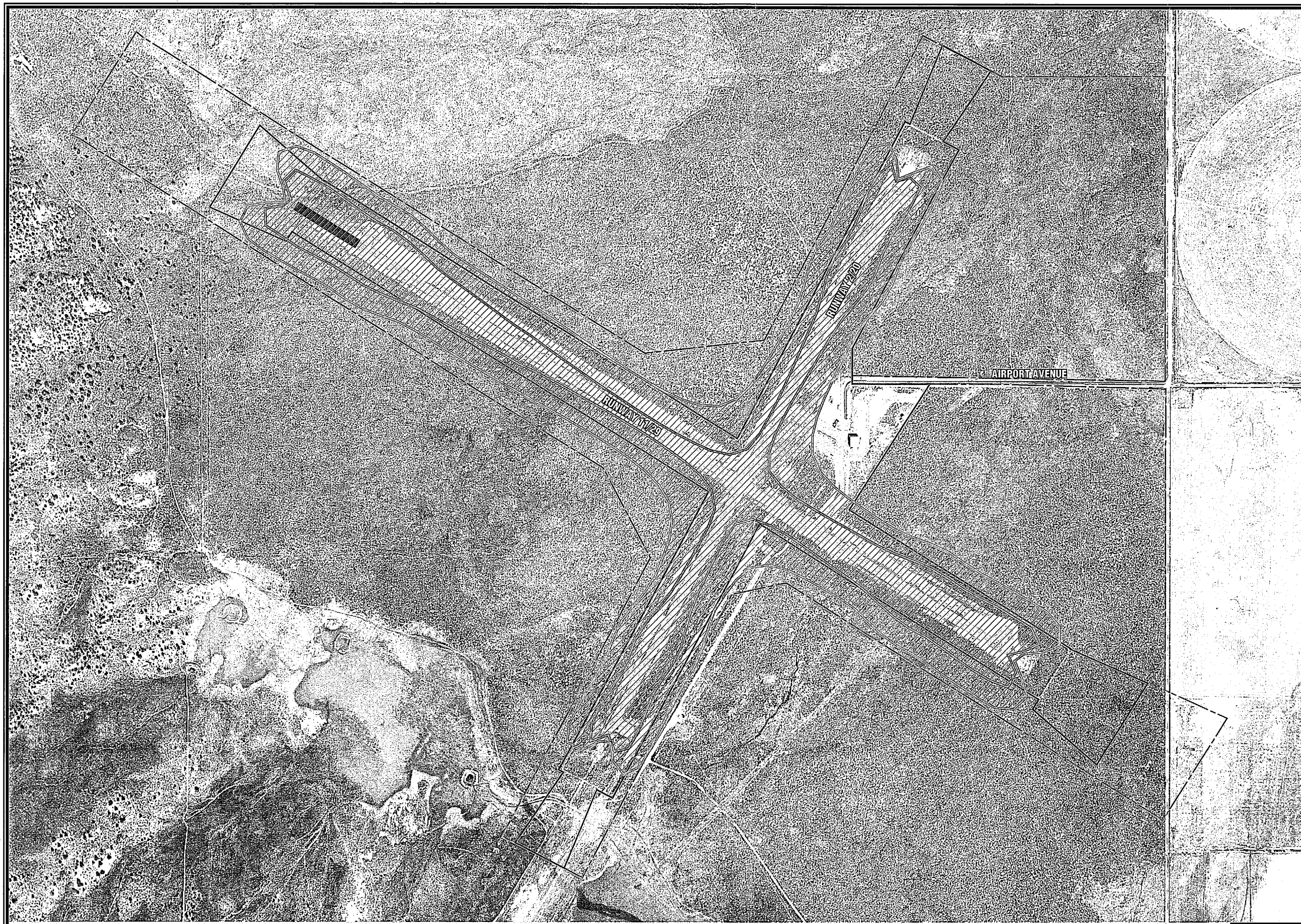
LEGEND

- Existing Airport Property Line
- - - Ultimate Airport Property Line
-  60-65 DNL
-  65+ DNL



Date of Photo: February 19, 1998





LEGEND

- Existing Airport Property Line
- - - Ultimate Airport Property Line
- 600' Runway Extension
- ▨ 60-65 DNL
- ▩ 65+ DNL



Date of Photo: February 19, 1998



LAND USE	Yearly Day-Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
RESIDENTIAL						
Residential, other than mobile homes and transient lodgings	Y	N ¹	N ¹	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N ¹	N ¹	N ¹	N	N
PUBLIC USE						
Schools	Y	N ¹	N ¹	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Government services	Y	Y	25	30	N	N
Transportation	Y	Y	Y ²	Y ³	Y ⁴	Y ⁴
Parking	Y	Y	Y ²	Y ³	Y ⁴	N
COMMERCIAL USE						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail-building materials, hardware and farm equipment	Y	Y	Y ²	Y ³	Y ⁴	N
Retail trade-general	Y	Y	25	30	N	N
Utilities	Y	Y	Y ²	Y ³	Y ⁴	N
Communication	Y	Y	25	30	N	N
MANUFACTURING AND PRODUCTION						
Manufacturing, general	Y	Y	Y ²	Y ³	Y ⁴	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y ⁶	Y ⁷	Y ⁸	Y ⁸	Y ⁸
Livestock farming and breeding	Y	Y ⁶	Y ⁷	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
RECREATIONAL						
Outdoor sports arenas and spectator sports	Y	Y ⁵	Y ⁵	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

See other side for notes and key to table.



KEY

Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
NLR	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
25, 30, 35	Land Use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

NOTES

- 1 Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- 2 Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
- 3 Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
- 4 Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
- 5 Land use compatible provided special sound reinforcement systems are installed.
- 6 Residential buildings require a NLR of 25.
- 7 Residential buildings require a NLR of 30.
- 8 Residential buildings not permitted.

Source: **F.A.R. Part 150, Appendix A, Table 1.**

Significant shifts in patterns of population movement or growth or public service demands are not anticipated as a result of the proposed development. It is expected, however, that the proposed new airport development would potentially induce positive socioeconomic impacts for the community over a period of years. The airport, with expanded facilities and services would be expected to attract additional users. It is expected to encourage tourism, industry, and trade and to enhance the future growth and expansion of the community's economic base. Future socioeconomic impacts resulting from the proposed development would be expected to be primarily positive in nature.

AIR QUALITY

The federal government has established a set of health-based ambient air quality standards (NAAQS) for the following six pollutants: carbon monoxide (CO), nitrogen dioxide (NO_x), sulphur dioxide (SO_x), ozone, lead, and PM10 (particulate matter of 10 microns or smaller). Currently, only airports in nonattainment and maintenance areas must meet the requirements of the General Conformity Rule provided in the Federal Clean Air Act; airports in attainment areas are assumed to conform.

According to correspondence received from the Arizona Department of Environmental Quality (ADEQ), "The proposed project does not fall within any nonattainment area, as designated by EPA pursuant to Section 107 of the Clean Air Act."; therefore, the General Conformity Rule does not apply. In addition, since the airport is not expected to enplane 1.3 million passengers and is projected to have less than 180,000 annual general aviation operations, no air quality analysis will be needed as part of any formal NEPA document submission.

The ADEQ did note that the proposed development plan would result in short-term air emissions resulting from the actual construction activities. During construction of proposed development items, the ADEQ recommended that steps should be taken to minimize the amount of particulate matter (dust) generated, including incidental emissions caused by strong winds, as well as tracking of dirt off the construction sites by machinery and trucks. Portable sources of air pollution, such as rock, sand, gravel and asphaltic concrete plants are required to be permitted by ADEQ prior to commencing operations.

WATER QUALITY

Airport activities can have a major impact on water quality. The Clean Water Act provides the authority to establish water quality standards, control discharges into surface and subsurface waters, develop waste management treatment plans, and issue permits for discharges and for dredged or fill materials.

Construction of the proposed improvements will result in an increase in impermeable surfaces and a resulting increase in surface runoff from both landside and airside facilities. The proposed development might result in short-term impacts on water quality, particularly suspended sediments, during and shortly after precipitation events during the construction phase.

Recommendations established in FAA Advisory Circular 150/5370-10 *Standards for Specifying Construction of Airports, Item P-156, Temporary Air and Water Pollution, Soil Erosion and Siltation Control* should be incorporated in project design specifications to mitigate potential impacts. These standards include temporary measures to control water pollution, soil erosion, and siltation through the use of fiber mats, gravel, mulches, slope drains, and other erosion control methods.

In accordance with Section 402(p) of the *Clean Water Act*, a *National Pollution Discharge Elimination System* (NPDES) General Permit is required from the Environmental Protection Agency. NPDES requirements apply to industrial facilities, including airports and all construction projects that disturb five or more acres of land.

With regard to construction activities, the Town of Colorado City and all applicable contractors will need to comply with the requirements and procedures of the NPDES General Permit, including the preparation of a *Notice of Intent* and a *Stormwater Pollution Prevention Plan*, prior to the initiation of project construction activities.

The construction program, as well as specific characteristics of project design, should incorporate *Best Management Practices* (BMPs) to reduce erosion, minimize sedimentation, control non-stormwater discharges, and protect the quality of surface water features potentially affected. BMPs are defined as nonstructural and structural practices that provide the most efficient and practical means of reducing or preventing pollution of stormwater. The selection of these practices at Colorado City Municipal Airport should be based on the site's characteristics and focus on those categories of erosion factors within the contractor's control, including: (1) construction scheduling, (2) limiting exposed areas, (3) runoff velocity reduction, (4) sediment trapping, and (5) good housekeeping practices. Inspections of the construction site and associated reporting may be required.

According to the Department of the Army, Corps of Engineers, the construction activities associated with airport development may require a permit issued under Section 404 of the *Clean Water Act*. The Corps of Engineers noted that a 404 permit would be required for the discharge of dredged or fill material into the waters of the United States, including adjacent wetlands. A jurisdictional delineation (completed by the Corps of Engineers) is required to determine if a permit is required. Prior to any construction activities, the Town of Colorado City should obtain a jurisdictional delineation of wetlands and waters of the U.S. from the Corps of Engineers as described in their letter.

Spills, leaks and other releases of hazardous substances into the local environment are often a concern at airports due to fuel storage, fueling activities and maintenance of aircraft. Stormwater flowing over impermeable surfaces may pick up petroleum product residues and, if not controlled, transport them off site.

Also of crucial concern would be spills or leaks of substances that could filter through the soils and contaminate groundwater resources. As growth in aviation activity occurs, additional fuel storage facilities will be necessary. Fuel storage facilities must be designed, constructed and maintained in compliance with Federal, State and local regulations, and must be registered with ADEQ. These regulations include standards for underground storage tank construction materials, the installation of leak or spill detection devices, and regulations for stormwater discharge. As noted by the ADEQ in their correspondence, above ground fuel storage tanks may require State Fire Marshall approval. Additionally, waste fluids, particularly oils, coolants, and degreasers, require proper management and disposal.

In their response, the ADEQ noted that an Aquifer Protection Permit may be required for the proposed aircraft wash facility. Additionally, pre-treatment of the waste water from the wash facility may be required prior to discharge.

DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F) LANDS

Paragraph 47e, *FAA Order 5050.4A* provides the following.

(7)(a) "Section 4(f) provides that the Secretary shall not approve any program or project which requires the use of any publicly-owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance, or any land from an historic site of national, state or local significance as determined by the officials having jurisdiction thereof unless there is no feasible and prudent alternative to the use of such land and such program includes all possible planning to minimize harm."

(7)(b) "...When there is no physical taking but there is the possibility of use of or adverse impacts to Section 4(f) land, the FAA must determine if the activity associated with the proposal conflicts with or is compatible with the normal activity associated with this land. The proposed action is compatible if it would not affect the normal activity or aesthetic value of a public park, recreation area, refuge, or historic site. When so construed, the action would not constitute use and would not, therefore, invoke Section 4(f) of the DOT Act."

The proposed airport development is not anticipated to impact any Section 4(f) properties.

In a related matter, the Arizona State Land Department noted that "The proposed project does not involve State Trust Land nor will it have any impact on State Trust lands."

HISTORIC, ARCHITECTURAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

The Arizona State Historic Preservation Officer (SHPO) was contacted regarding the potential presence of cultural resources within the area of the proposed development. In their response, the SHPO stated "Our records check does not indicate that archaeological sites or cultural resources have been identified within or adjacent to the area identified on your map as Alternative A; however, the property has not been systematically surveyed." The SHPO recommended that "...the project area be surveyed by a qualified archeologist in order to locate any existing cultural resources."

In their correspondence, the United States Department of the Interior, Bureau of Land Management (BLM) noted: "The original inventory for Colorado City Airport (1989) identified three archeological sites. Placement of the original runways was accomplished to avoid impacting and, thus, mitigating those sites. Future expansion of the runways may impact these or additional archaeological sites not yet identified." Consistent with SHPO recommendations, the BLM noted: "An inventory will be required to identify archaeological sites that may qualify for the National Register of Historic Places."

The BLM also noted a high potential for encountering buried archaeological sites and/or human remains. According to BLM, the Native American Graves and Protection Act of 1990 requires consultations with Native American groups which might have human remains or cultural or patrimonial items disturbed by a Federal project. The BLM recommended the completion of a legally binding document such as a Memorandum of Agreement or Memorandum of Understanding between the Town and the Native American groups to identify procedures to quickly mitigate any undiscovered archaeological resources or human remains.

Considering the concerns of the BLM and SHPO, a survey of the proposed acquisition sites (depending on the boundaries of the original survey) should be conducted to determine whether any findings are significant, and whether any additional mitigation measures are necessary prior to the implementation of the proposed development. A survey of existing airport property may also be needed. Should archaeological resources be encountered during any preconstruction activities, work should cease in the area of the discovery and the SHPO be notified immediately, pursuant to 36 CFR 800.11.

BIOTIC COMMUNITIES AND THREATENED AND ENDANGERED SPECIES OF FLORA AND FAUNA

As part of this evaluation, the U.S. Department of the Interior, Fish and Wildlife Service (USFWS) and the Arizona Game and Fish Department (AG&F) were contacted to request information regarding potential impacts to threatened or endangered species or species of special concern. A response was received by the USFWS, however, AG&F did not respond.

In their response, the USFWS noted sixteen (16) federally-listed and two candidate endangered species within Mojave County. While the AG&F did not respond to this information request, additional coordination with this agency will be required before any construction activities as the State of Arizona protects some plant and animals species not protected by Federal law.

Prior to any development, a biological survey may be needed to evaluate the types of native vegetation to be disturbed by the proposed development and to determine whether any impacts to the above referenced species would be anticipated.

COASTAL MANAGEMENT PROGRAM AND COASTAL BARRIERS

The proposed development of Colorado City Municipal Airport is not located within the jurisdiction of a State Coastal Management Program. The Coastal Zone Barrier resources system consists of undeveloped coastal barriers along the Atlantic and Gulf Coasts. These resources are well outside of the sphere of influence of the airport and its vicinity, and do not apply to the proposed development.

WILD AND SCENIC RIVERS

The proposed development of Colorado City Municipal Airport is not located within the vicinity of a designated wild and scenic river. No impacts to wild and scenic rivers is anticipated as a result of the proposed airport development.

WATERS OF THE U.S., INCLUDING WETLANDS

Prior to any development activities, the Town of Colorado City should request a jurisdictional delineation from the U.S. Army Corps of Engineers for the development area including the future proposed airport property. This delineation would identify any waters of the U.S., including wetlands and intermittent streams, under jurisdiction of this agency. If the proposed construction could directly or indirectly affect any waters of the U.S., the project might require a U.S. Army Corps of Engineers permit per *Section 404 of the Clean Water Act*.

FLOODPLAINS

Because Colorado City Municipal Airport is located within an area which is predominantly BLM land, no floodplain mapping has been completed for the airport. The only existing floodplain mapping for the Town of Colorado City was completed prior the Town annexing the airport property and is dated August 4, 1998. This mapping identified a 100-year flood plain approximately one-half mile north of the existing airport site. Per a phone conversation with representatives from the Town of Colorado City, the airport is not within any designated floodplain and is considered a non-risk drainage area.

FARMLAND

According to correspondence received from the United States Department of Agriculture, "The proposed improvements and expansion of the municipal airport in Colorado City are exempt from the requirements of the Farmland Protection Policy Act (FPPA) - as revised in 1994, that excludes land which is already in or is committed to urban development, currently used as water storage, or land that is not prime or unique farmland."

ENERGY SUPPLY AND NATURAL RESOURCES

No concern regarding existing energy production facilities or known energy resource supplies was expressed by the agencies for this proposed development. A slight increase in energy demand will likely occur as a result of the proposed project. Additional electricity will be needed for the proposed runway and taxiway extensions, new/relocated navigation lights, the terminal building, hangars and parking areas. In addition to this electric demand, expenditures of manpower, fuel, electricity, chemicals, water and other forms of energy will be necessary to construct the improvements and to provide for maintenance and operation of the facilities.

LIGHT EMISSIONS

The proposed lighting improvements for the airport include the installation of Medium Intensity Taxiway Lighting (MITL) on the proposed parallel and exit taxiways and the installation of precision approach path indicator (PAPIs) to each end of Runway 2-20. It is also anticipated that outdoor lighting would be installed within the automobile parking areas, aircraft parking apron and surrounding all terminal and FBO buildings and hangars. Because of the distance from the airfield to light-sensitive land uses, impacts associated with any new light emissions are not expected to be significant.

SOLID WASTE

Slight increases in the generation of solid waste are anticipated as a result of the proposed development and overall growth in aviation activity. Because landfills can attract birds for feeding, the location of landfills near airports is not desired. Normally, landfills are discouraged within a five miles of a runway end or within 10,000-foot radius of jet airports and a 5,000-foot radius of non-jet airports. The only operational landfill near Colorado City Municipal Airport is the Arizona Strip Community Landfill located approximately 5.6 miles south-southeast of the Runway 29 threshold. The Colorado City Municipal Waste Landfill, located in the Town of Colorado City has been closed.

CONSTRUCTION IMPACTS

Construction activities have the potential to create temporary environmental impacts at an airport. These impacts primarily relate to noise resulting from heavy construction equipment, fugitive dust emissions resulting from construction activities, and potential impacts on water quality from runoff and soil erosion from exposed surfaces.

A temporary increase in particulate emissions and fugitive dust may result from construction activities. The use of temporary dirt access roads would increase the generation of particulates. Dust control measures, such as watering exposed soil areas, will need to be implemented to minimize this localized impact.

Any necessary clearing and grubbing of construction areas should be conducted in sections or sequenced to minimize the amount of exposed soil at any one time. All vehicular traffic should be restricted to the construction site and established roadways.

The provisions contained in *FAA Advisory Circular 150/5370-10, Standards for Specifying Construction of Airports, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control* should be incorporated into all project specifications. During construction, temporary dikes, basins, and ditches should be utilized to control soil erosion and sedimentation and prevent degradation of off-airport surface water quality. After construction is complete, slopes and denuded areas should be reseeded to aid in the vegetation process.

CONCLUSION

Based on the review of correspondence provided by various federal, state and local agencies, potential environmental issues and considerations anticipated as a result of the development and operation of Colorado City Municipal Airport have been identified and are summarized on **Exhibit D**. As a result of the NEPA process, mitigation measures may be recommended to limit the potential impacts related to a number of

these resources including water quality, waters of the U.S., archaeological and cultural resources, and biotic communities and threatened and endangered species of flora and fauna. Please note that as more specific information is gathered through a formal EA process, additional issues may arise.

CATEGORY	IMPACT
Noise	None, Existing and ultimate 65 DNL Contour on airport property.
Compatible Land Use	None
Social Impacts	None
Socioeconomic Impacts	None
Water Quality	Less-than-significant, incorporate best management practices in construction programs
Air Quality	Less-than-significant, incorporate best management practices in construction programs
Section 4(f) Lands	None
Historical/Cultural Resources	None anticipated, need to complete archeological survey prior to construction, coordinate with Native American groups
Biotic Communities, Protected Species	None anticipated, need to complete biological analysis
Wetlands	None anticipated, complete jurisdictional delineation
Floodplains	None, airport is not located in designated floodplain
Coastal Zone Areas, Coastal Barriers	None, Not Applicable
Wild and Scenic Rivers	None
Farmland	None
Energy Supply/Natural Resources	Less-than-significant, additional energy use as a result of additional facility development
Light Emissions	Less-than-significant
Solid Waste Impacts	None
Construction	Less-than-significant, incorporate best management practices in construction programs